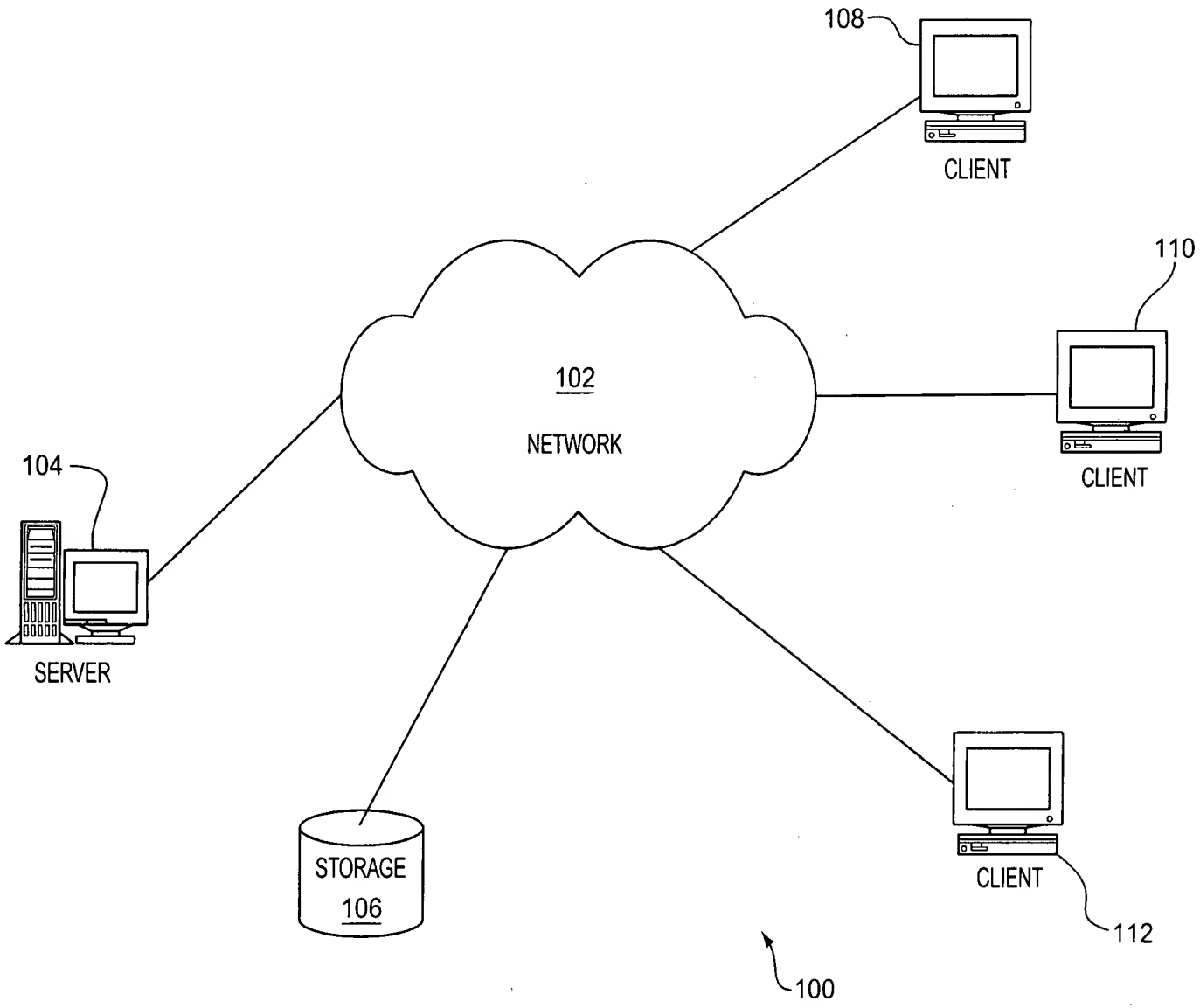
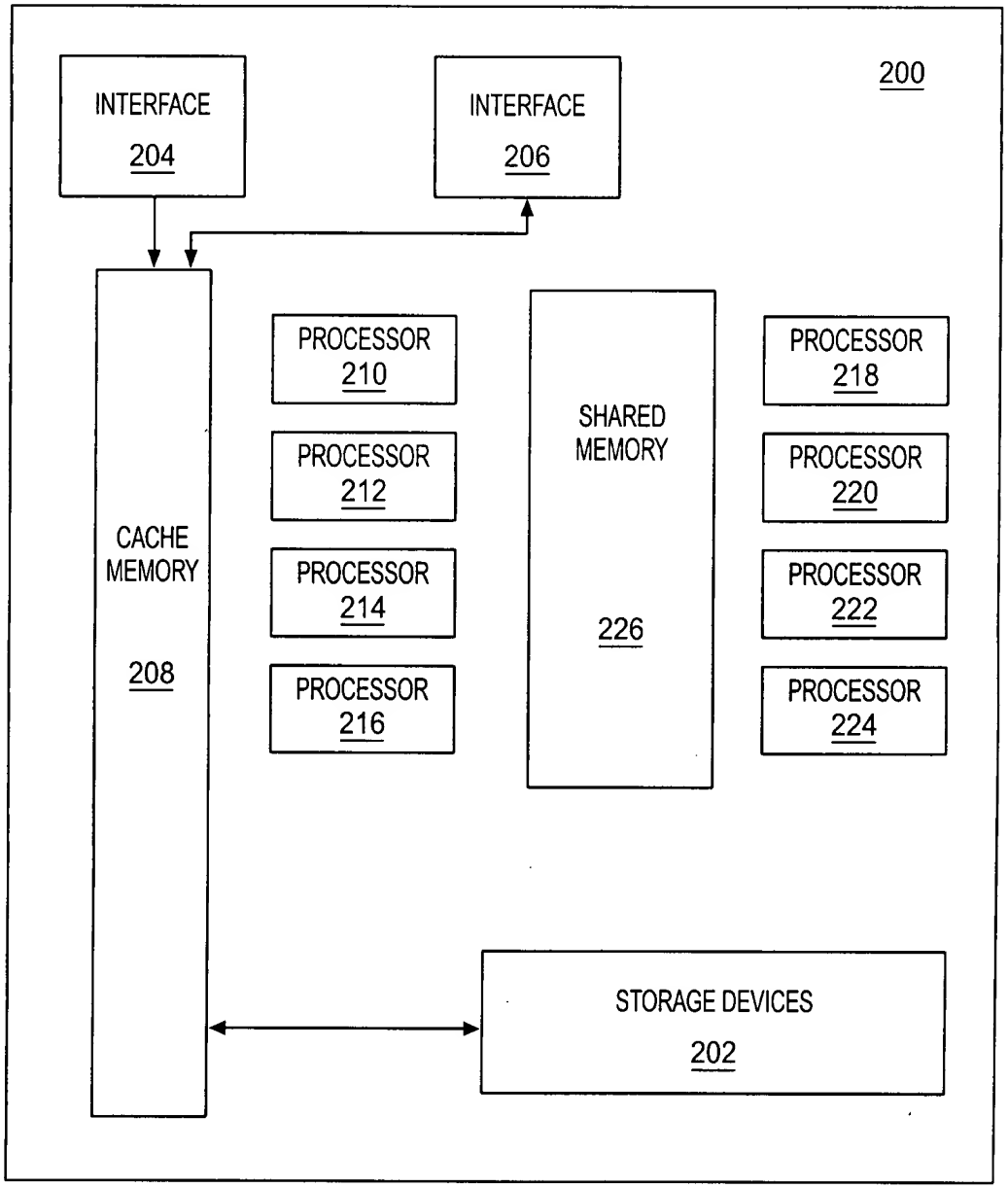
09751272 "050290

FIG. 1



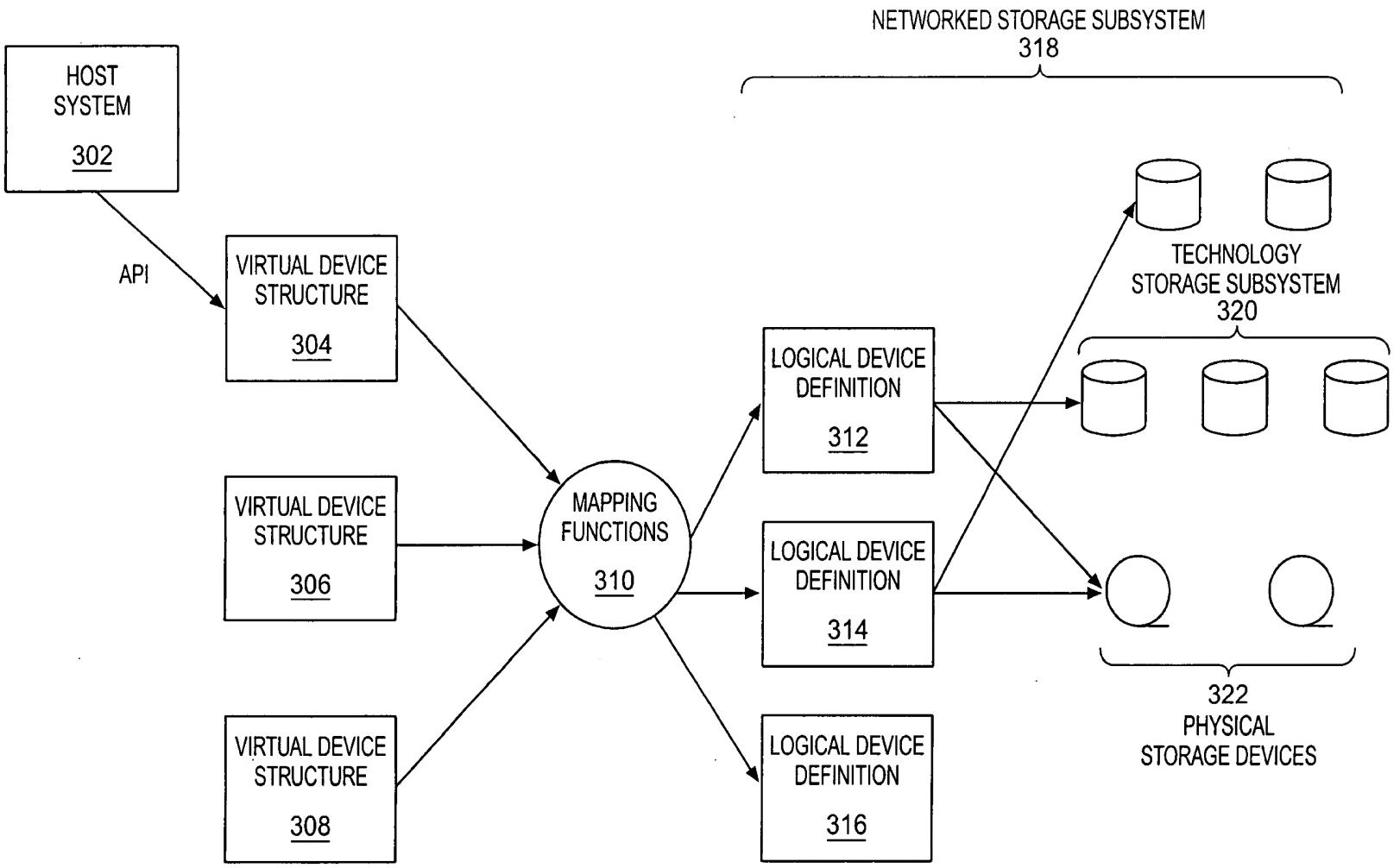
09753772 "052901

FIG. 2



TO5290 '27752760

*FIG. 3*



TOS290.2775760

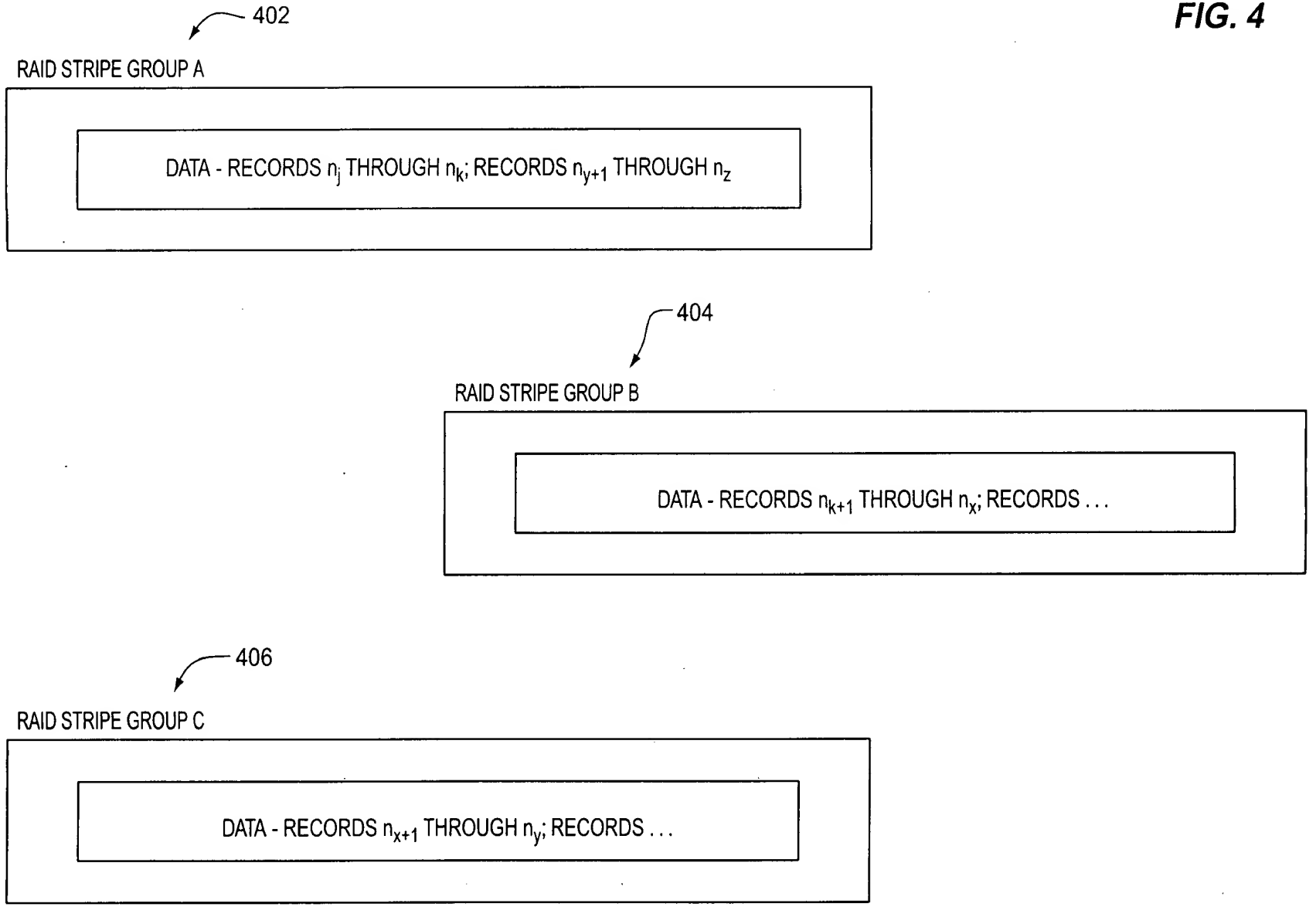
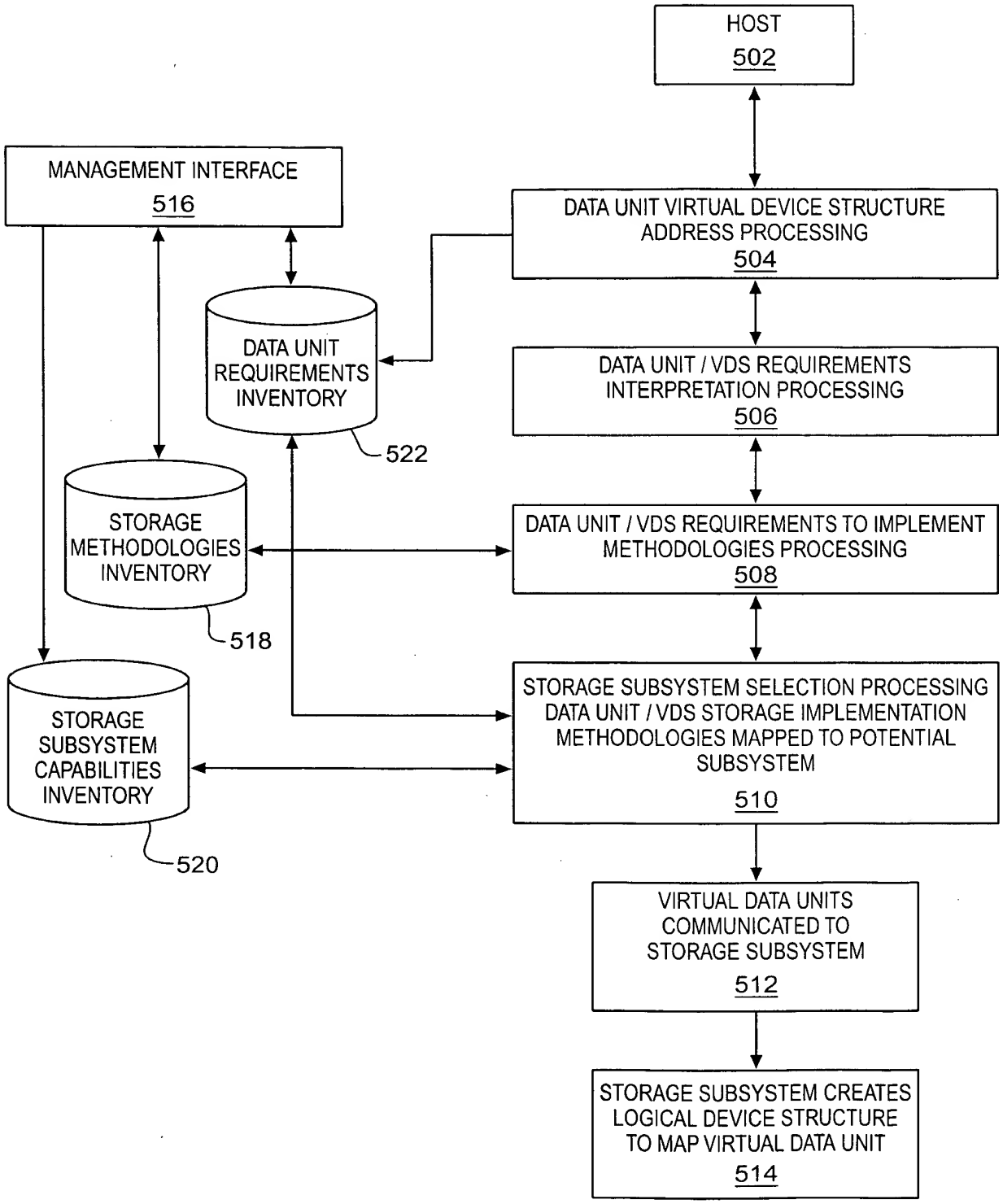


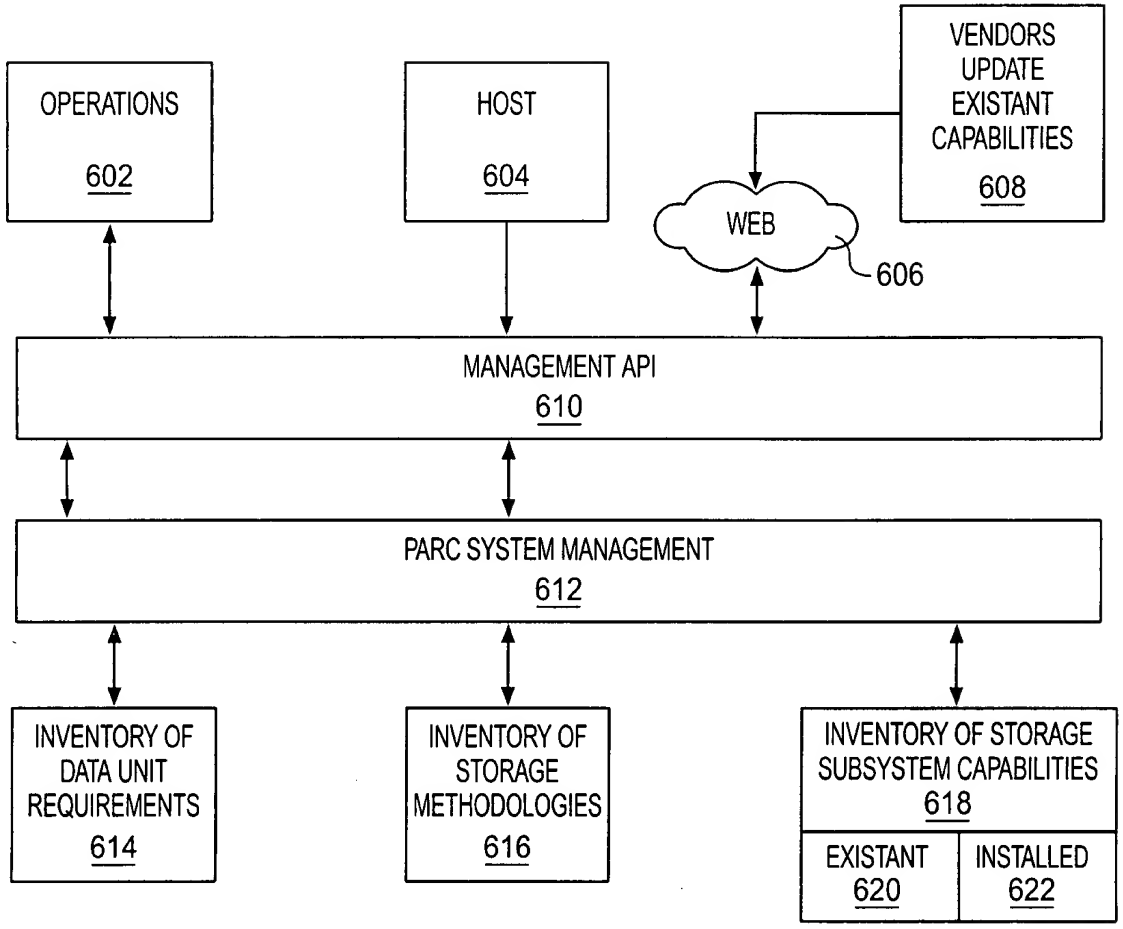

FIG. 4

FIG. 5


HOST
502
MANAGEMENT INTERFACE
516
DATA UNIT VIRTUAL DEVICE STRUCTURE ADDRESS PROCESSING
504
DATA UNIT REQUIREMENTS INVENTORY
522
DATA UNIT / VDS REQUIREMENTS INTERPRETATION PROCESSING
506
STORAGE METHODOLOGIES INVENTORY
518
DATA UNIT / VDS REQUIREMENTS TO IMPLEMENT METHODOLOGIES PROCESSING
508
STORAGE SUBSYSTEM CAPABILITIES INVENTORY
520
STORAGE SUBSYSTEM SELECTION PROCESSING DATA UNIT / VDS STORAGE IMPLEMENTATION METHODOLOGIES MAPPED TO POTENTIAL SUBSYSTEM
510
VIRTUAL DATA UNITS COMMUNICATED TO STORAGE SUBSYSTEM
512
STORAGE SUBSYSTEM CREATES LOGICAL DEVICE STRUCTURE TO MAP VIRTUAL DATA UNIT
514

T05290 "27752760

*FIG. 6*



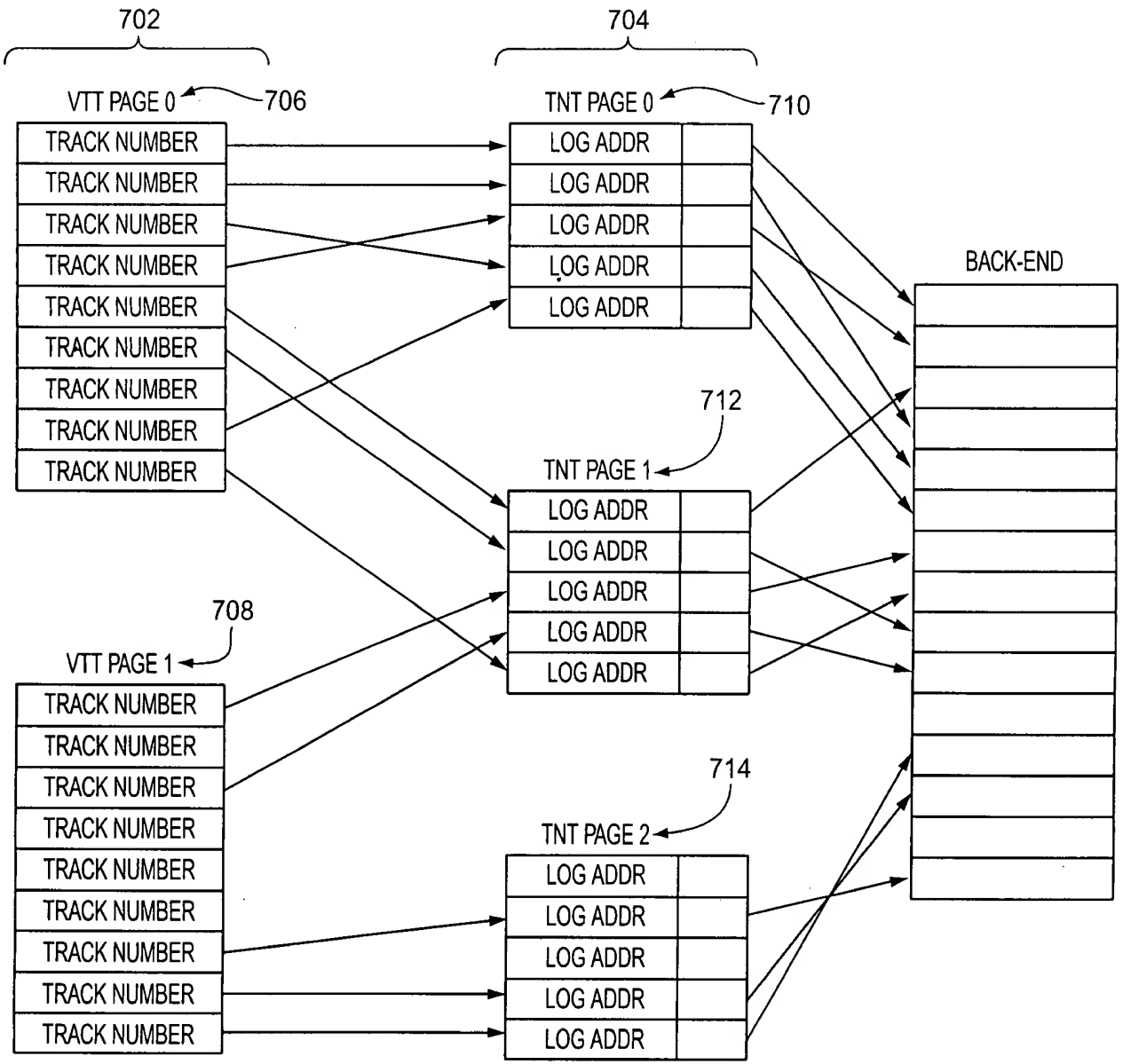

702
704
VTT PAGE 0
706
TNT PAGE 0
710
TRACK NUMBER
LOG ADDR
BACK-END
712
TNT PAGE 1
708
VTT PAGE 1
714
TNT PAGE 2

FIG. 7

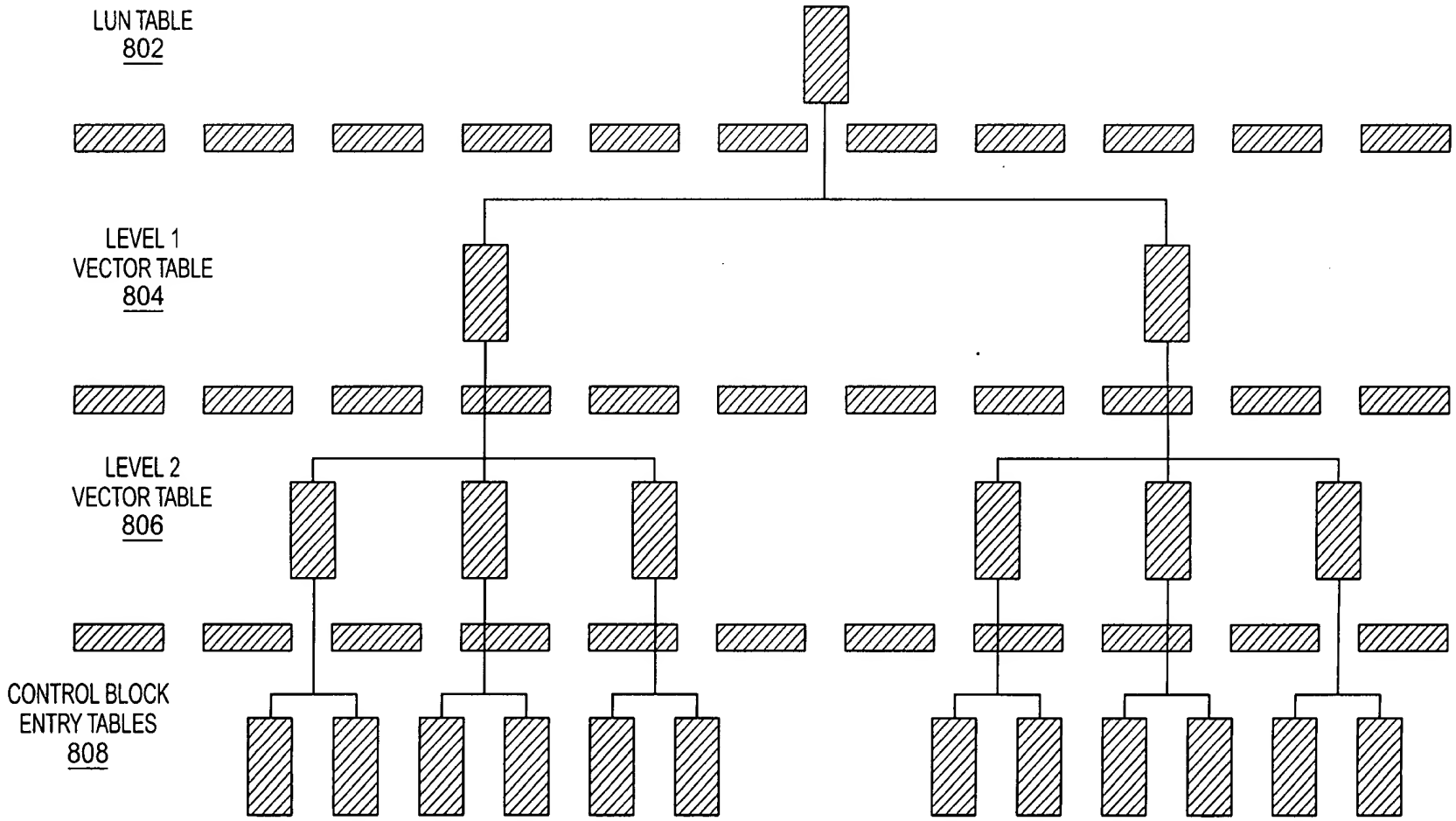

LUN TABLE
802
LEVEL 1
VECTOR TABLE
804
LEVEL 2
VECTOR TABLE
806
CONTROL BLOCK
ENTRY TABLES
808

*FIG. 8*

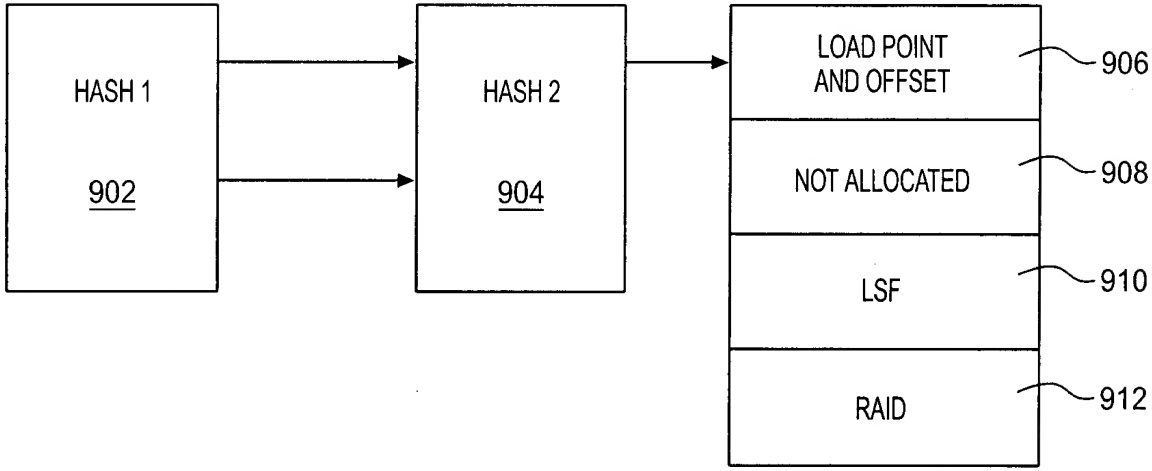

HASH 1
902
HASH 2
904
LOAD POINT AND OFFSET
906
NOT ALLOCATED
908
LSF
910
RAID
912

*FIG. 9*

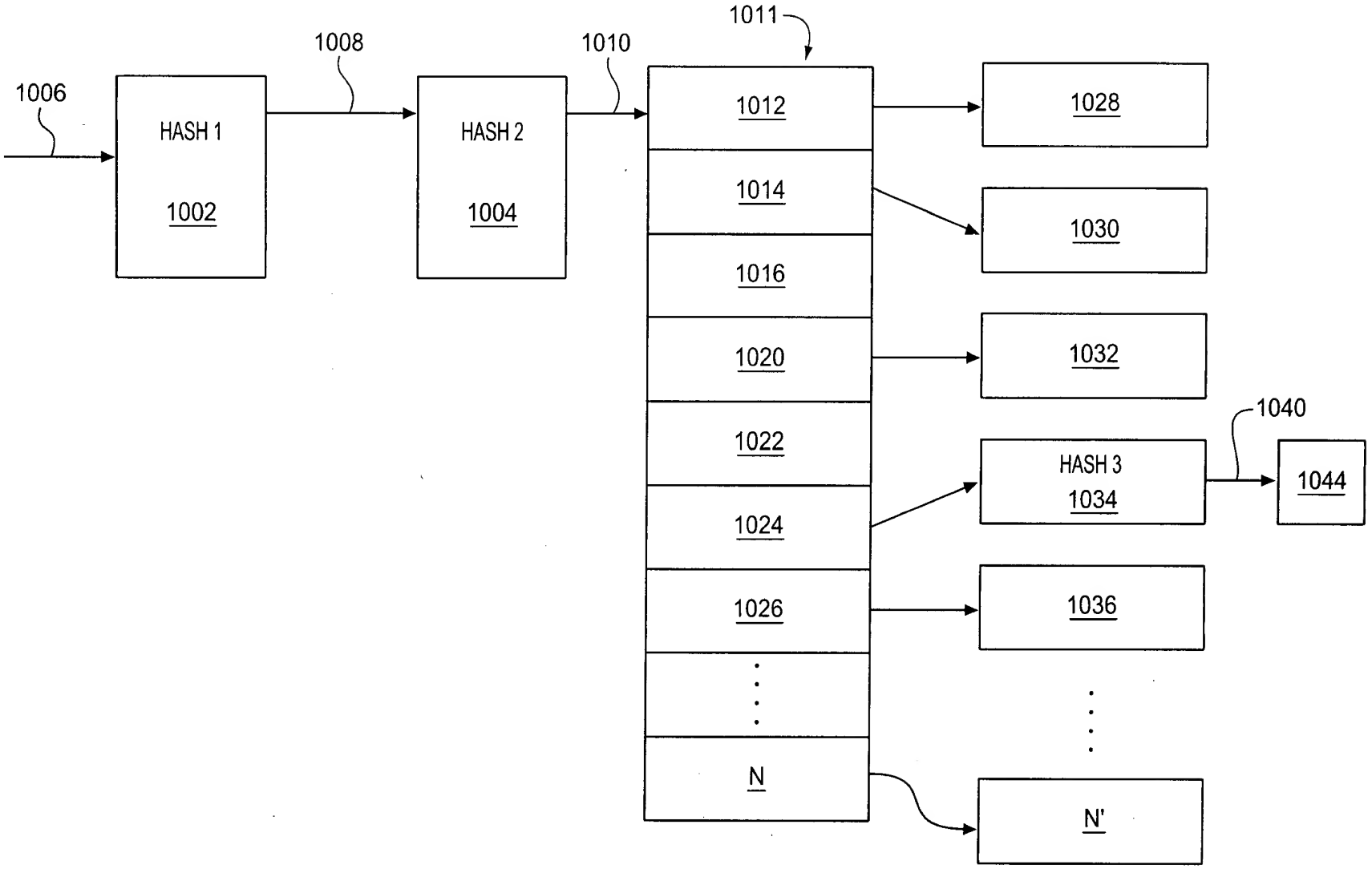

1006
HASH 1
1002
1008
HASH 2
1004
1010
1011
1012
1014
1016
1020
1022
1024
1026
N
1028
1030
1032
1040
HASH 3
1034
1044
1036
N'

*FIG. 10*

T05290 "27752760

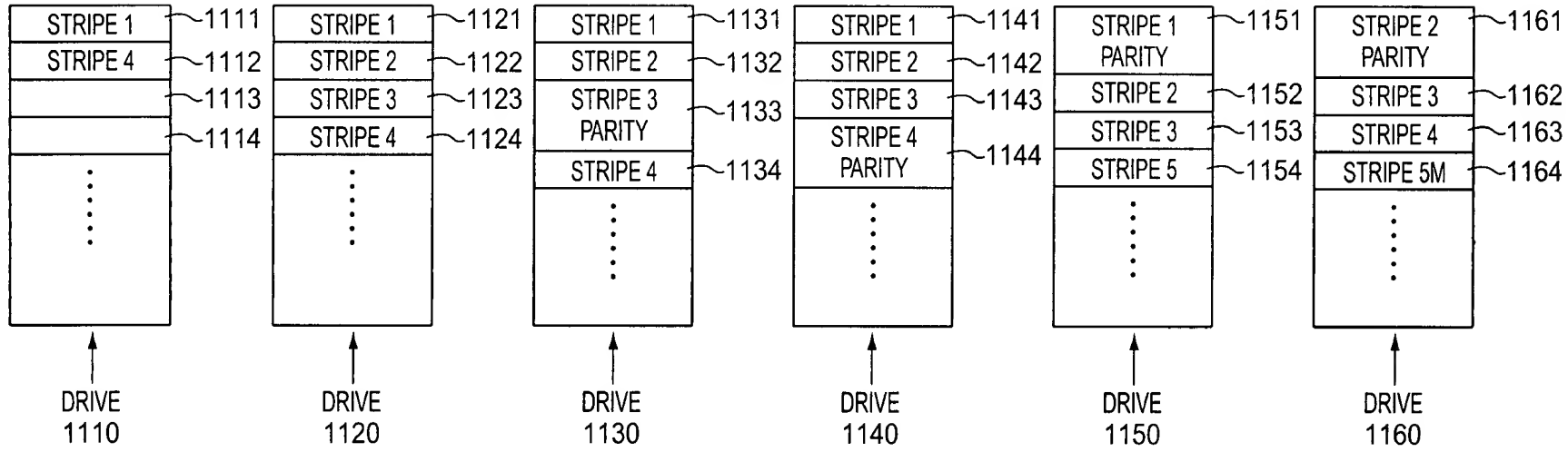



*FIG. 11*

TO5290 "2275260

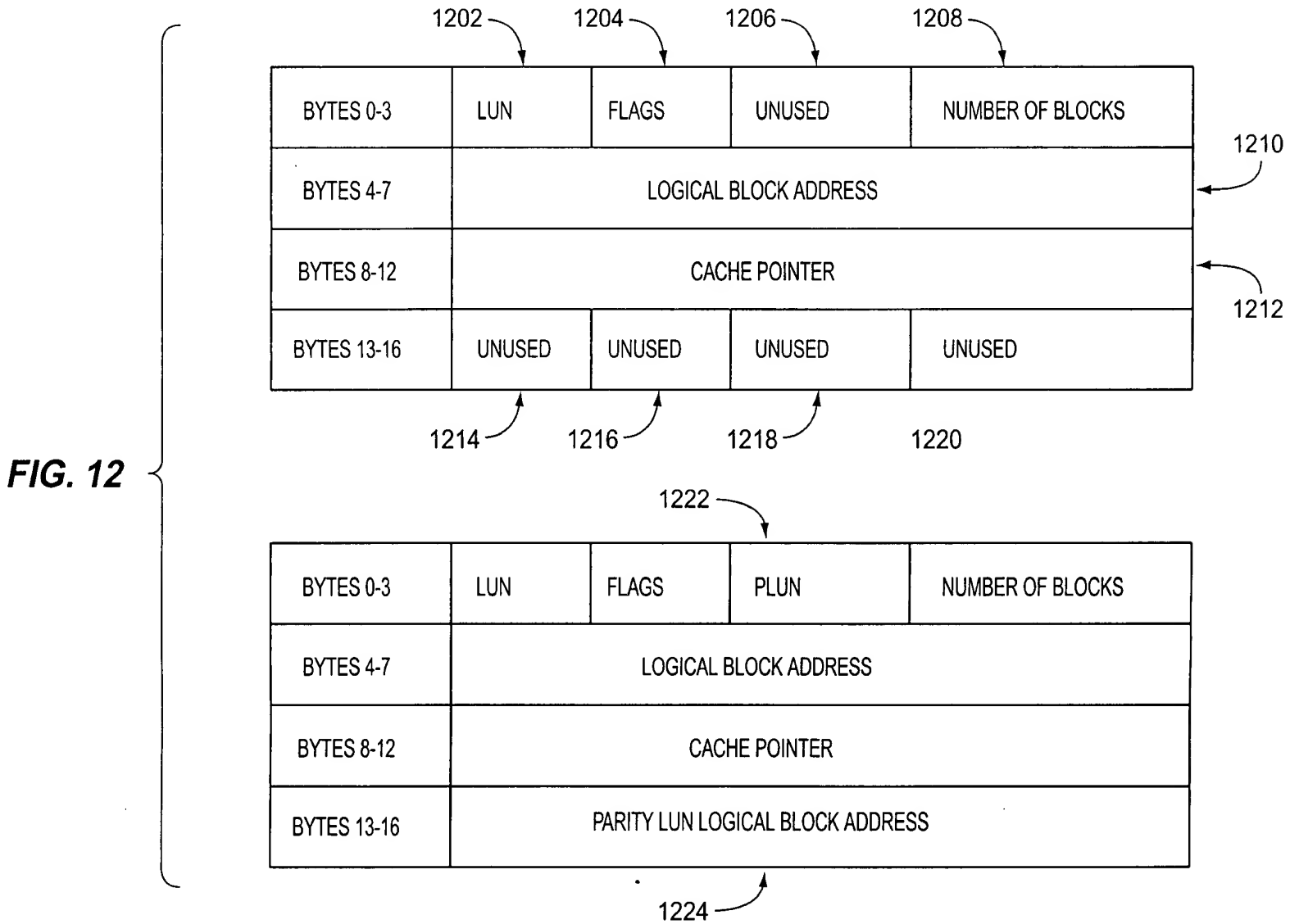



FIG. 12

09751772 "052501

FIG. 13

| | | | |
|---|---|---|---|
| TIMESTAMP | | | |
| LBA OF PREVIOUS STRIPE | | | |
| PREVIOUS STRIPE LUN | INDEX OF PARITY DRIVE | RAID TYPE OF STRIPE | # OF STRIPS IN STRIP |
| STRIP SIZE IN BLOCKS | | | |
| | | | |
| 1st LUN IN STRIPE | ACTIVE COUNT | # OF HOST PIECES IN STRIP | UNUSED |
| LBA OF DATA ON 1st LUN | | | |
| 2nd LUN IN STRIPE | ACTIVE COUNT | # OF HOST PIECES IN STRIP | UNUSED |
| LBA OF DATA ON 2nd LUN | | | |
| Nth LUN IN STRIPE | ACTIVE COUNT | # OF HOST PIECES IN STRIP | UNUSED |
| LBA OF DATA ON Nth LUN | | | |
| | | | |
| HOST LUN | LENGTH IN STRIP | HOST LENGTH | |
| HOST LBA | | | |
| | | | |
| HOST LUN | LENGTH IN STRIP | HOST LENGTH | |
| HOST LBA | | | |

09751760 "05290

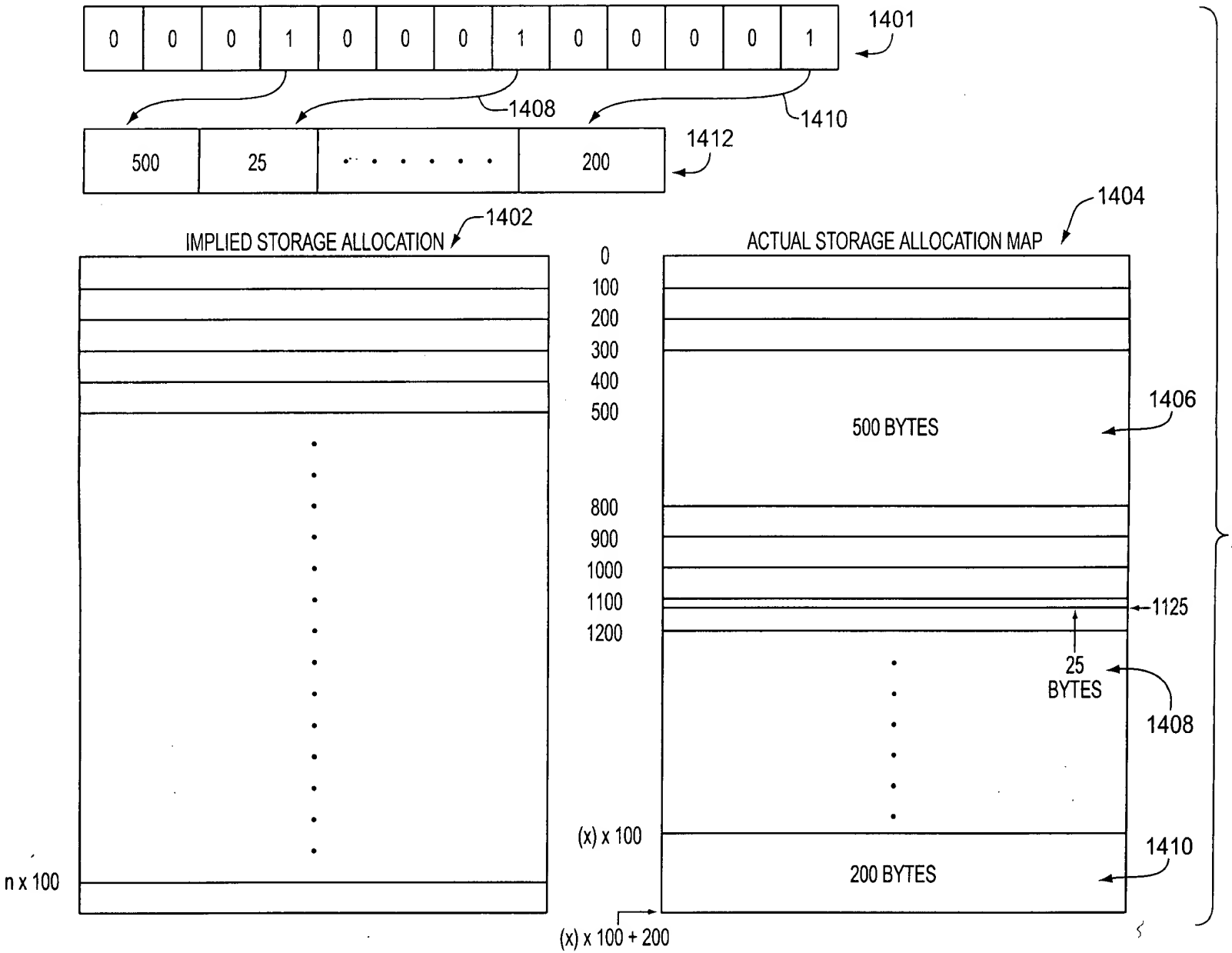



FIG. 14